

## Claims

1. A method for simultaneous and fractional determination of peracetic acid and hydrogen peroxide, which  
5 comprises adding a solution containing peracetic acid and hydrogen peroxide to a pH buffer solution with pH from 5 to 6 containing a molybdate, iodine and an iodide ion, and measuring redox potential changes in a reaction of peracetic acid with the iodide ion and a reaction of hydrogen peroxide with the  
10 iodide ion.

2. The method for simultaneous and fractional determination of peracetic acid and hydrogen peroxide according to claim 1, wherein the concentration of the molybdate is from 0.5 to 1 mmol/l, the concentration of iodine is from 0.3 to  
15 2 mmol/l, the concentration of the iodide ion is from 5 to 20 mmol/l, and the redox potential changes are measured using a potentiometer having a working electrode made of platinum, gold or carbon.

3. The method for simultaneous and fractional  
20 determination of peracetic acid and hydrogen peroxide according to claim 1 or 2, wherein a measuring solution containing known concentrations of an iodide ion and iodine is used which is prepared by adding an aqueous solution of known concentration(s) of peracetic acid and/or hydrogen peroxide to a pH buffer  
25 solution containing potassium iodide in a measuring container

to allow a reaction with potassium iodide.

4. The method for simultaneous and fractional determination of peracetic acid and hydrogen peroxide according to claim 1 or 2, wherein a pH buffer solution containing a molybdate, iodine and an iodide ion is used which is obtained  
5 by adding a pH buffer solution containing potassium iodide to a measuring container to cause potentiostatic electrolysis and thereby generate iodine and then adding the molybdate.